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09/698,526	10/26/2000	Dan Vassilovski	990301	6563
23696 7590 11/14/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
KANG, INSUN				
ART UNIT		PAPER NUMBER		
2193				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/698,526

Applicant(s)

VASSILOVSKI ET AL.

Examiner

INSUN KANG

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 21-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 21-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/25/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responding to amendment filed on 7/21/2008.
2. Claims 1-8 and 21-48 are pending and have been examined.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21 and 22 encompass software *per se* by reciting “means for” limitations, which based upon the specification includes software elements and no hardware elements (as all means are possibly claimed). Claims 23 and 24 encompass non-tangible “signal” media (Specification: page 4, lines 20-21), which is non-statutory.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 2-3, 6, 22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by **Shaw** (USPN 6,381,741).

Claim 2

Shaw disclosed a method for configuration management for a computing device (*Abstract*), comprising:

- ♦ providing available software to be loaded into said computing device to said computing device through an interface (*Figure 1, elements 50 and 70; column 2, lines 58-67; column 1, line 65 to column 2, line 10*);
- ♦ determining whether or not resident software stored in a storage device associated with said computing device is authenticated (*column 3, lines 40-65; Figure 2*);
- ♦ determining whether or not said available software is authenticated (*column 4, line 6 to column 7, line 46; column 5, lines 34-41*);
- ♦ rejecting said available software if said resident software is authenticated and said available software is not authenticated (*column 3, line 66 to column 4, line 3; column 5, lines 34-41*); and
- ♦ updating said resident software with said available software if said resident software and said available software are not authenticated (*column 3, lines 45-58, system*

determines resident software corrupt and needs update; as shown above available software is also checked for authenticity).

Claim 3

Shaw disclosed the method of claim 2 (as discussed above) wherein said determining whether or not said resident software is authenticated comprises:

- ♦ determining whether or not an authentication flag has been set (*column 3, lines 45-57*);
- ♦ wherein said resident software is determined to be authenticated if said authentication flag has been set (*column 3, lines 48-50*); otherwise
- ♦ said resident software is determined to be unauthenticated (*column 3, lines 48-50*).

Claim 6

Shaw disclosed the method of claim 2 wherein said determining whether or not said resident software is authenticated comprises of performing a direct authentication procedure on said resident software (*column 3, line 66 to column 4, line 5*).

Per claims 22, 31, and 34, they are apparatus versions of claims 2, 3, and 6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 2, 3, and 6 above.

Per claims 24, 25, and 28, they are medium versions of claims 2, 3, and 6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 2, 3, and 6 above.

Per claims 37, 38, and 41, they are apparatus versions of claims 2, 3, and 6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 2, 3, and 6 above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-5, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shaw** (USPN 6,381,741).

Claim 1

Shaw disclosed a method for configuration management for a computing device (*Abstract*), comprising:

- ♦ providing available software to be loaded into said computing device to update a resident software within said computing device (*Figure 1, elements 50 and 70; column 2, lines 58-67; column 1, line 65 to column 2, line 10*);
- ♦ determining whether or not resident software stored in a storage device associated with said computing device is authenticated (*column 3, lines 40-65; Figure 2*);

- ♦ determining whether or not said available software is authenticated (*column 4, line 6 to column 7, line 46*);
- ♦ updating said resident software with said available software if said resident software and said available software are not authenticated (*column 3, lines 45-58, system determines resident software corrupt and needs update; as shown above available software is also checked for authenticity*);
- ♦ updating said resident software if said resident software is not authenticated but said available software is authenticated (*column 5, lines 34-41, no requirement to authenticate resident software here; further column 3, lines 45-58, sometimes update regardless of “TrustData” bit, for example if “RunDownloader” is set*)

Shaw did not explicitly state setting an authentication flag if said resident software is not authenticated but said available software is authenticated. **Shaw** demonstrated that it was known at the time of invention to make use of flag indicators (column 3, lines 45-57; and column 4, line 45) and **Shaw** (as shown above) clearly demonstrates authenticating available code segments. It would have been obvious to one of ordinary skill in the art at the time of invention to implement the system of **Shaw** with a method of recording available code is authenticated (a flag) as found in **Shaw**'s teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to make use of a common method/device (flag) of communicating/recording information (in this case is or isn't code authenticated). This action occurs regardless of whether resident software is or is not authenticated.

Claim 4

Shaw disclosed the method of claim 3 wherein said authentication flag is set when said available software is determined to be authenticated (*as above under claim 1*).

Claim 5

Shaw disclosed the method of claim 4 wherein said authentication flag is set by a service technician (*column 3, lines 55-65*).

Per claim 46:

Shaw did not explicitly state that said authentication flag indicates whether authenticated software is loaded into said computing device. **Shaw** demonstrated that it was known at the time of invention to make use of flag indicators (column 3, lines 45-57; and column 4, line 45) and **Shaw** (as shown above) clearly demonstrates authenticating available code segments. It would have been obvious to one of ordinary skill in the art at the time of invention to implement the system of **Shaw** with a method of recording available code is authenticated (a flag) and loaded into a computing device as found in **Shaw**'s teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to make use of a common method/device (flag) of communicating/recording/loading information (in this case is or isn't code authenticated). This action occurs regardless of whether resident software is or is not authenticated.

Per claims 21 and 47 , they are apparatus versions of claims 1 and 46, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1 and 46 above.

Per claims 23 and 48 , they are medium versions of claims 1 and 46, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1 and 46 above.

Per claims 44 and 45 , they are apparatus versions of claims 1 and 46, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1 and 46 above.

Per claims 32 and 33 , they are apparatus versions of claims 4 and 5, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 4 and 5 above.

Per claims 26 and 27 , they are medium versions of claims 4 and 5, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 4 and 5 above.

Per claims 39 and 40, they are apparatus versions of claims 4 and 5, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 4 and 5 above.

9. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shaw** (USPN 6,381,741) in view of admitted prior art (herein referred to as **APA**).

Claims 7 and 8

Shaw disclosed the method of claim 6 (as discussed above). **Shaw** did not explicitly state: wherein said direct authentication procedure comprises performing a cyclic redundancy check; or wherein said direct authentication procedure comprises performing a secure hashing

algorithm. **APA** demonstrated that it was known at the time of invention to utilize cyclic redundancy check, CRC (Specification, page 5, lines 24-35) and secure hashing algorithms, SHA (Specification, page 5, lines 24-35). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of **APA** into the system and method of **Shaw**. This implementation would have been obvious because one of ordinary skill in the art would be motivated to perform well-known authentication techniques to determine when an update was necessary in order to improve the performance of a computing system.

Per claims 35 and 36, they are apparatus versions of claims 7 and 8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 7 and 8 above.

Per claims 29 and 30, they are medium versions of claims 7 and 8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 7 and 8 above.

Per claims 42 and 43, they are apparatus versions of claims 7 and 8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 7 and 8 above.

Response to Arguments

10. Applicant's arguments filed 7/21/2008 have been fully considered but they are not persuasive.

Per 101 rejections:

1) The applicant argues that claims 21 and 22 are explicitly directed to an apparatus that is statutory and means for claims are construed to cover the corresponding structure described in the specification (remark, 10).

In response, as the previous office action addressed, claims 21 and 22 directing to an apparatus that does not have any physical structural elements are non-statutory. Even though

112 6th paragraph has been invoked, the corresponding structure in the disclosure is not automatically and inherently limited to hardware-inclusive embodiments. It is entirely possible for the corresponding disclosed means to cover an embodiment of software alone. The means may include computer hardware, however, in view of the disclosure, the means can be reasonably implemented as mere program instructions that provide available software, determine the authenticity, update software etc as recited in the claims. Further, a CPU “load” instruction would be software and provides a means for loading. The hardware(s) itself doesn’t realize such functionalities recited in the claims, it only executes the instructions for providing, determining and updating software. The instructions can be the means of the claimed apparatus and therefore the apparatus can be a mere software system. Therefore, with no other physical structure in the independent claims to rely on, the alleged “apparatus” of the claims turns out to be a computer program per se, and, thus, does not fit within the definition of the categories of patentable subject matter set forth in § 101. Therefore, the claims are non-statutory; accordingly, the rejection has been maintained. “An apparatus having a processor” is recommended.

2) The applicant argues that claims 23 and 24 are directed to a computer-readable medium such as a storage device 112 and claims to a computer readable medium are statutory. The specification has no mention of a non-tangible signal media. Instead, the specification clearly references a tangible wireless communication system (remark, 10-11).

In response, as previously addressed, Applicant’s Specification defines statutory and non-statutory media. Applicant’s claims lay claim to both. The specification does not provide antecedent basis for the exact terminology “a computer-readable medium.” The explicit and deliberate definition of the terminology, “a computer-readable medium” has not been provided

but the intrinsic evidence of embodiments intended to be covered within the meaning is provided. The intrinsic evidence in page 4 lines 20-21 shows that the medium can be a data signal embodied in a carrier wave/rays etc that is used as a wireless communication medium. Such medium does not have a physical structure, rather it is the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism per se which does fit within the definition of the categories of patentable subject matter set forth in § 101. Therefore, the claims are non-statutory. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

3) Applicant argues Shaw does not disclose, “updating said resident software with said available software if said resident software and said available software are not authenticated.” The Shaw patent only discloses overwriting a segment of code if the downloaded segment of code is authenticated and validated (remark, 11-12).

In response, Show validates local information such as ID to determine authenticity (column 3, lines 48-54; See dictionary of computing, “authentication”, copy provided previously). When the TrustData is not set and RunDownloader is set, a “reset flag 28 is set in the writeable memory and the Navio boot code 32 forces a system reboot and update at step 120 (col. 3, lines 45-58). Therefore, if the validity check determines that the writeable memory does not contain authentication information and the application code as not trusted, update is performed (i.e. col. 3 lines 50-58).

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-R 7:30-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/
Examiner, Art Unit 2193